volumetric/topographical representation. These images can be presented in a selected sequence to provide an animation of body B. In one form, a sequence of about 32 to about 64 generally evenly spaced views about axis R are used to generate a rotating animation of body B about axis R.

From operation **166**, procedure **120** continues with operation **168**. In operation **168**, one or more measurement indicators are also displayed that overlay one or more body images. In one embodiment, the displayed image of a person can be adjusted to hide/conceal body features to which a privacy objection might be made. Alternatively, the rendering can include a schematic body image similar to a mannequin in appearance.

Alternatively or additionally, the volumetric/topographical representation of body B can be displayed as a number of sectional images. FIG. **6** presents computer-generated images determined from an experiment that was performed using an arrangement to simulate system **20**. Image **320** corresponds to a front viewing angle of a clothed person; where the person's clothing is generally transparent to the interrogating electromagnetic radiation. For image **320**, indicator lines **330***a*, **330***b*, **330***c*, **330***d*, and **330***e* correspond to various sectional views **340** that are more specifically designated head sectional view **340***a*, chest sectional view **340***b*, stomach sectional view **340***c*, thigh sectional view **340***d*, and knee sectional view **340***e*; respectively. Image **320** and sectional views **340** were determined from a volumetric/topographical representation obtained in accordance with procedure **120** using an ultrawide sweep range of 24 GHz to 40 GHz for each activation of an array element. Eight arc segments S were processed for this experiment in an arrangement like that represented in FIG. **5**. It should be appreciated that this topographic representation defines a number of different circumferences of the depicted body, such as those represented by sectional views **340**. In still other embodiments, display of body images may be absent. Alternatively or additionally, the information gathered with subsystem **40** is sent via computer network **64** to one or more remote sites **80**. Sites **80** can perform some or all of the data processing represented by operations **160**, **162**, **164**, **166**, and/or **168** in lieu of processor(s) **44**. In one process, a clothed individual is nonintrusively scanned by booth **30** and the measurement(s), image(s), animation, and/or topographical information of the individual's body is sent via server **63** and network **64** to a designated computer **82**. From this computer **82**, the measurement information can be sent via network **64** to one or more e-commerce clothing suppliers or other clothing business to electronically order or manufacture clothing of the desired size and style. Alternatively or additionally, the topographical information can be used to automatically generate by computer or otherwise custom two-dimensional (2-D) patterns for apparel manufacture.

For procedure **120**, transceiver **42** and processor(s) **44** include logic to perform the various operations described. This logic can be in the form of software programming instructions, firmware, and/or of a hardwired form, just to name a few. Furthermore such logic can be in the form of one or more signals carried by, on, or with memory **46**, R.M.D. **48**, and/or one or more parts of computer network **70**. In one example, logic signals to perform one or more operations is transmitted to or from processor(s) **44** via network **70**. Alternatively or additionally, programming for processor(s) **44** is transported or disseminated through R.M.D. **48** and/or one or more other storage devices.

FIG. **7** illustrates interrogation system **420** of another embodiment of the present invention. System **420** illuminates body B with selected electromagnetic radiation in the manner described in connection with system **20**. For system **420**, body B is in the form of person **422** wearing clothing articles **424***a* and **424***b*. As in previously described embodiments, system **420** can be used to interrogate inanimate objects as well.

System **420** includes scanning booth **430** coupled to control and processing subsystem **440**. Scanning booth **430** includes stationary platform **432** arranged to support body B and frame **433** to support motor **434** coupled to array **436**. In contrast to the platform rotation of booth **30**, scanning booth **430** selectively rotates array **436** about rotational axis R and platform **432** during interrogation. For this arrangement, array **436** follows a generally circular pathway to provide a corresponding imaginary cylinder about platform **432**. In one form suitable for scanning a person in the standing position, the radius of this cylinder is about 1 meter. Array **436** is otherwise configured the same as array **36**.

In system **420**, subsystem **440** is configured the same as subsystem **40** of system **420** and is likewise arranged to perform procedure **120**. However, during the performance of procedure **120**, the operation of subsystem **440** accounts for the movement of array **436** relative to platform **432** instead of the movement of platform **32** relative to array **36**. System **420** can include one or more encoders (not shown) operatively coupled to subsystem **440** and/or other devices/techniques to track the position of array **436** relative to platform **432**. System **420** can further include a communication subsystem (not shown) the same as subsystem **60** to remotely communicate with subsystem **440**. Like previously described embodiments, system **420** is used to determine measurement, topographical, image, animation, and/or three-dimensional volume information about body B.

FIG. **8** illustrates electromagnetic radiation interrogation system **520** of yet another embodiment of the present invention. System **520** illuminates body B with selected electromagnetic radiation of the type previously described. For system **520**, body B is in the form of person **522** wearing garments/clothing designated by reference numerals **524***a* and **524***b*. As in previously described embodiments, system **520** can be used to interrogate animate or inanimate objects.

System **520** includes scanning booth **530** coupled to control and processing subsystem **540**. Scanning booth **530** includes frame **533** arranged to receive body B and support array **536**. In contrast to the linear arrays **36** and **436** of previously described systems **20** and **420**, array **532** is arranged as a ring or hoop generally centered with respect to centerline vertical axis V. A number of electromagnetic radiation transmitting/receiving elements are arranged in a generally circular pathway along the ring. These elements operate to interrogate body B with electromagnetic radiation including one or more wavelengths in the millimeter, microwave, and/or adjacent wavelength bands. Array **536** is arranged for translational movement along axis V to scan body B as represented by arrow T. One or more motors or other prime mover(s) (not shown) are utilized to selectively move array **536** along axis V.

Referring further to the partial top view of FIG. **9**, array **536** is sized with opening **537** to receive body B therethrough as array **536** moves up and down along axis V. In FIG. **9**, axis V is generally perpendicular to the view plane and is represented by crosshairs. With the vertical motion of array **536**, an imaginary cylinder is defined about body B in accordance with the circular path defined by the array ring; however, neither body B nor array **536** is rotated relative to the other, instead translational movement of array **536** is used to scan body B vertically.